HELENE FRANKEL

MS. FRANKEL: My name is Helene Frankel and I'm a concerned citizen living in St. Louis, Missouri. I
1... am deeply concerned about the wisdom and safety of using trucks and trains to transport 40,000 metric tons of highly active radioactive wastes across the majority of our country as well as for the safety and feasibility of the Yucca Mountain site.

My husband and I drive 25,000 miles a year as wholesale reps. Our territory ranges from Wichita, Kansas to Cleveland, Ohio; from Chicago, Illinois to Lexington, Kentucky. We know the major and not so major Midwestern highways. We have seen and heard of some horrific accidents and some dangerous substances spilled onto the roads. We have all heard the reports of entire towns being evacuated because of a spill, especially from train derailments.

2 How do you think we can design and manufacture a flawless, untippable, unleakable transport tank? Remember when they told us that the oil pipelines in Alaska were impossible to leak? If the worst happens -- which it will sometime in 30 years -- most of our urban population centers and rural food production regions are at risk of being contaminated. Neither science nor industry has figured out how to clean up an oil spill; imagine radioactive spills.

3 To avoid accidents, will you close down the highways every other day as another shipment passes by? That's a lot of logistical planning and citizen inconvenience. If you are worried about terrorists, will you be able to announce the routes and slow-downs or closures in advance? Will I and other drivers want to share the highways with a nuclear convoy or will I get used to the risks and drive anyway? I am opposed in principle to exposing the majority of the territory and population of the United States to the risk of
1 transporting radioactive waste to Yucca Mountain, Nevada. I especially do not want St. Louis to be a hub
cont. as this stuff crosses the Mississippi, just as nobody will want it going through his or her city or state.

4 Having done some research on the destination, I have equally grave concerns about the safety of the site, after risking so much to get the radioactive waste there. The evidence is contradictory; there is no consensus. The peer review panel convened by the DOE put out a "highly critical report" in February, '99 after studying the DOE's own assessment of Yucca Mountain. I find that worrisome.

5 Some of my concerns include the findings that Nevada is currently the third most active earthquake region in the United States. Based on information from the Council of the National Seismic System Composite Catalogue and the Southern Great Basin Seismic Network, there have been 621 seismic events greater than 2.5 within a 50 mile radius since 1976 of the Yucca Mountain site. The largest on June 29, 1992, was 5.6 with an epicenter only eight miles southeast from the mountain on a previously unidentified fault.

How can we be certain that this area will not become more active in the next 10,000 years? The evidence from the study by Brian Wernicke from the California Institute of Technology suggests that the area is entering a period of greater activity; that there is greater crustal movement than originally estimated; that the ground could stretch as much as three feet in 1,000 years. This could create the seismic tension that could precipitate a volcano or earthquake, thereby caving in this mountain, building new ones or conceivably exploding off its top, any of which would spill the contents stored inside. Remember, they have found seashell fossils on top of Mount Everest. Change is rarely what we have planned, or man plans, God laughs.

6 ... Another debate about water in the mountain has dangerous implications for the structural integrity of the storage canisters. If they come in contact with water, whether seeping from above, forced up from hydrothermal activity or from a rise in the water table as a result of more rainfall from a climatic shift, the

6 cont. canisters would corrode faster than the estimated 10,000 years, and nobody gives a warranty that long. This would allow penetration of the ground waste with radioactivity. The discovery of Chlorine 36, a chemical isotope from the atomic testing in the 1950's at the level projected for the repository indicates the existence of some faults allowing water to permeate to this depth in a maximum of 50 years; how much longer to seep through the other half of the mountain? They originally hypothesized that this would take longer than 10,000 years. This site is not as impervious to moisture or as dry as originally thought.

7 cont. Another worry of mine that points to the possibility of incomplete or compromised science was a report that the tests to study the long-term effects of heat on the storage site, which is very important considering the heat of all this radioactive waste, particularly on the water in the rocks, will not be ready before 2006, yet the current schedule which assumes approval is to start construction in 2005. The electric bill for the heaters they are using is $8,823 a month. That's almost $106,000 a year for at least eight years for results that are not going to wait -- when they're not even going to wait for them before they begin. I wish I owned stock in Nevada Power --

MR. BROWN: One minute, please.

MS. FRANKEL: They seem to be the only ones who will benefit from these tests.

8 I grew up thrilled to be part of the Pepsi Generation, believing in the slogan, "Better living through chemistry," expecting NASA to be infallible. Unfortunately, now I have seen a lot of mistakes that resulted from what seemed like good science at the time, and accidents happen. Not everything can be anticipated. In my beloved space program we lost the Challenger over cheap O-rings and now the two Mars probes. Were both done too quickly for political expediency? The nuclear power plants were licensed optimistically expecting science would find a solution for the waste disposal before the end of their useful life. This is only our best guess so far and the only one the government has been considering since 1987. That is not certain enough for me.

9 We do not know everything. We cannot predict for 10,000 years. We are only less than 6,000 years away from the copper age. Heck, we can't even predict the week's weather nor agree if the planet is warming, cooling or staying the same. How can we design for 10,000 years of weather? Shouldn't we be concerned that stockings run as you put on a new pair; that buildings are torn down after 75 years because they are no longer useful; that durable goods are to last five years; that cars that run 150,000 miles are bragged about? How in our egocentricity do we think that we can design and build a storage facility of this complexity to hold such dangerous material to last 100 centuries? This is not reality. This is science fiction, like the Star Wars program that did not work this week. This is not reasonable. This is the ultimate hubris of man.